## THE MALES OF TWO NORTH AMERICAN CERAPACHYINE ANTS.

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The very rare and primitive ants of the subfamily Cerapachyinae Forel were previously represented in the United States by only two species, *Acanthostichus* (*Ctenopyga*) texanus Forel and *Cerapachys* (*Parasyscia*) augustae Wheeler. This paper includes the description of the male of a new species of *Cerapachys* subgenus *Parasyscia*, and that of the heretofore unknown

male of augustae.

Our first recorded cerapachyine species was augustae, which Wheeler described and figured from workers and a female collected at Austin, Tex., by Miss Augusta Rucker. Later he was able to add some interesting observations on the biology of this species and to furnish a description and figure of the egg and larval stage. Forel (Ann. Soc. Ent. Belg. 48: 168, 1904) described the second species, texanus, from a female collected at Brownsville, Tex., by Wickham. Except for workers of augustae in the United States National Museum, and for the types of the two species which are in other museums, no North American ants of the subfamily Cerapachyinae seem to have been recognized heretofore in the collections of this country. Of the 25 specimens of augustae in the United States National Museum, 3 were taken at El Paso, Tex., by a quarantine official of the Bureau of Entomology and Plant Quarantine, United States Department of Agriculture, from plants originating in Mexico. The remaining 22 specimens were removed from the stomach of an armadillo at Huntsville, Tex., by F. W. Tabor, of the Bureau of Biological Survey, United States Department of Agriculture.

Since no male has ever been described for any species of *Cerapachys*, subgenus *Parasyscia*, the descriptions of the male of *augustae* and of the new species should be of considerable significance; for this reason, I have thought it advisable to

figure the male of augustae.

Although the male of Acanthostichus texanus is still unknown, the generic characters for the caste of this species can well be obtained from that of the Mexican species Acanthostichus (Ctenopyga) townsendi, which was described and figured by Ashmead (Proc. Ent. Soc. Wash. 8: 29, 1906). The males of our North American Acanthostichus, subgenus Ctenopyga, can be distinguished from those of Cerapachys, subgenus Parasyscia, by the prescence of Mayrian furrows, more than one cubital and discoidal cell (usually two or three of each) in the front wing, an impressed or flattened area (pygidium) with scalloped

border on the sixth gastric tergite, and a very much stouter forked process on the seventh gastric sternite.

## Cerapachys (Parasyseia) augustae Wheeler.

Cerapachys augustae Wheeler, 1902, Biol. Bull. 3: 182; Wheeler, 1903, Psyche 10: 205.

Male.—Length 3.2-3.5 mm. (Fig. 1, A.)

Fig. 1A, Male of Cerapachys (Parasyscia) augustae Wheeler. B, Front wing. Drawn by Arthur D. Cushman.

Head measured through the eyes approximately 1.15 to 1.25 times as broad as long. Mandible well developed, masticatory border curved, ending in a long tooth, remainder of border toothless or with very minute teeth. Anterior border of clypeus with a median tooth or angular projection. Antennal fossa contiguous with posterior border of clypeus. Frontal carinae subparallel, not concealing articulations of antennal scapes. Clypeus broader than long. Eye large, very convex, placed near anterior border of head. Ocelli prominent, placed at summit of head. Posterior border of head round, meeting each side to form a rather distinct, subangular, posterior corner. Antenna 13segmented; scape very slightly longer than combined length of first 2 funicular segments, funiculus gradually enlarging apically, segments robust, last funicular segment longer than combined length of the 2 preceding segments. Pronotum less than one-third as long as mesonotum, strongly inclined, but not concealed by mesonotum. Parapsidal sutures but no Mayrian furrows, the former seen only in certain lights. Front wing (Fig. 1, B) with a very large stigma, discoidal cell absent or present but without cubital or radial cell. Legs moderately long, tibial spurs pectinate, spurs on front and hind tibiae especially well developed. Anterior three-fifths of mesonotum convex in profile. Petiole nonpedunculate, sybcylindrical in profile, slightly flattened above, approximately one and onethird times as long as high. First gastric segment distinctly higher than long. Gaster subelliptical from above, with distinct constrictions between the segments. Sixth gastric tergite without an impressed area (pygidium). Seventh gastric sternite with a forked process, each fork slender, narrowed and curved apically, with the point directed slightly dorsad.

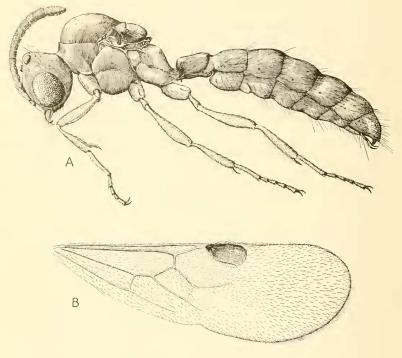
Body smooth and shining, with the following exceptions: Coarse rugulae between mesonotum and scutellum, and fine reticulae on side of scutellum, and on metanotum; a few scattered, piligerous punctures on the body, these especially noticeable on summit of head, mesonotum, and posterior part of dorsal surface of gaster.

Hairs moderately abundant, slender, grayish, unusually long at apex of gaster; row of hairs at posterior border of each gastric segment; pubescence rather dense and closely appressed on funiculus, apparently longer and less appressed on legs.

Rather uniform dark reddish brown; legs lighter.

Described from 4 specimens labeled as follows: Florence, Ariz., June 13, 1902, Ashmead collection; Florence, Ariz., July 28, 1917, W. M. Wheeler; Higley, Ariz., October 1, 1916, E. G.

Holt; Quijotoa, Pima County, Ariz., August 27, 1927, Cornell University, Lot 542.



Cerapachys (Parasyscia) davisi, new species.

The male holotype of *davisi* differs from the known males of *augustae* as follows:

Size larger (3.8 mm.); posterior border of head rounded and merging into each side without forming as definite a subangular posterior corner; all funicular segments except first distinctly longer than broad (less incrassated than in augustae); pronotum almost one-half length of mesonotum; front wing with or without a closed cubital cell; veins more prominent and more nearly enclosing radial and cubital cell (when cubital cell is not completely enclosed); sculpture different, davisi having fine rugulae between inner border of eye and antenna, and similar rugulae on epinotum, especially the sides of epinotum; sixth tergite more coarsely sculptured, subopaque; color dark brown, almost black.

Described from holotype and 3 paratype specimens, each bearing the label "Fort Davis, Tex., Jeff Davis County, 5000 feet, Davis Mountains, Mrs. O. C. Poling, Nov. 15, 1927." These have been assigned United States National Museum Number 56091.

The paracypes range in length from 3.8 to 4.2 mm.